

 ***U5-L3&4-Analyzing and Graph The Relationship Between Dependent and Independent Variables***

***1. Evaluate each of the following for x=2***

a. y = 2 x

b. y = x +$ \frac{1}{4}$

c. y = 4x+5

d. y = 5 x + 35

***2. Show what you learned. Complete each statement, using the variables x and y as needed.***

• If the rule is "Add 6", the equation is:…………. So, if x is$ \frac{1}{4} $, then y would be :………

***3. Write an equation.***

Use the variables x and y, where x is the independent variable to evaluate y

a. The equation "Multiply by 5", substitute if x = 7

b. The equation "Multiply by 4 and add 3", substitute if x = 3.3

***4. Complete the following.***

a. If y=2x+3, and x = 4, then y =………….

b. In the equation : y = $\frac{1}{2}$x + 3, if x = 6 then y would be…………

c. (4,……… ) satisfies the equation : y = $\frac{1}{2}$x+1

***5. Complete the following tables:***

a. The equation : y = x + 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x | 0 | 1 | 2 | 5 |
| y |  |  |  |  |



***6.*** Complete the following table according to the equation: y = 2x + 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x | 1 | …….. | 4 | 6 |
| y | 3 | 7 | …….. | 13 |

***7.*** Complete the following tables, then make the graphs.

1. The equation : y = 2x

 Y

|  |  |  |  |
| --- | --- | --- | --- |
| x | 1 | 3 | 5 |
| y |  |  |  |
| (x,y) |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
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***8.*** Using variables x and y where x is independent to write the equation that represents the relation of the following table: the equation is

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| X | 5 | 7 | 8 | 10 | 14 |
| Y | 2 | 4 | 5 | 7 | 11 |

***9.Choose the correct answer:***

1. If y = 7 + 3x and x = 10 then the value of y which satisfies the equation is ………..

a. 37 b. 20 c. 1 d. 4

2. The ordered pair that satisfies the equation: y = 2x + 1 is ………..

a. (1,1) b. (1,2) c. (1,3) d. (1,4)

3. The ordered pair (6,……… ) satisfies the equation y = 5x - 2

a. 30 b. 32 c. 54 d. 28

4. In the equation: y =$\frac{1}{2}$x + 1 , x = 12 then y would be……….

a. 7 b. 13 c. 6 d. 6.5

5. In the equation: y = x + 1/2 , if the output is 5 1/2 then the input is………..

a. 6 b. 5 c. 22 d. 4 1/2